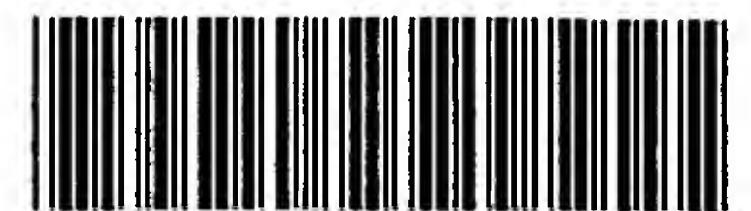


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The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 101577, 974
Source: IFWP
Date Processed by STIC: 5/5/06

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IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/577,974

DATE: 05/15/2006
TIME: 10:03:36

Input Set : A:\50318.012001.txt
Output Set: N:\CRF4\05152006\J577974.raw

3 <110> APPLICANT: Ensoli, Barbara
 4 Caputo, Antonella
 5 Laus, Michele
 6 Tondelli, Luisa
 7 Sparmacci, Katia
 8 Gaviolo, Riccardo
 10 <120> TITLE OF INVENTION: USE OF MICROPARTICLES FOR ANTIGEN DELIVERY
 12 <130> FILE REFERENCE: 50318/012001
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/577,974
 C--> 14 <141> CURRENT FILING DATE: 2006-05-03
 14 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/012421
 15 <151> PRIOR FILING DATE: 2004-11-03
 17 <150> PRIOR APPLICATION NUMBER: GB 0325624.5
 18 <151> PRIOR FILING DATE: 2003-11-03
 20 <160> NUMBER OF SEQ ID NOS: 55
 22 <170> SOFTWARE: PatentIn version 3.3
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 25 <211> LENGTH: 309
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Human immunodeficiency virus
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 31 <221> NAME/KEY: CDS
 32 <222> LOCATION: (1)..(309)
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 37 1 5 10 15
 39 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt 96
 40 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 41 20 25 30
 43 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tac ggc 144
 44 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
 45 35 40 45
 47 agg aag aag cgg aga cag cgt cga aga cct cct caa ggc agt cag act 192
 48 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
 49 50 55 60
 51 cat caa gtt tct cta tca aag caa ccc acc tcc caa tcc cga ggg gac 240
 52 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
 53 65 70 75 80
 55 ccg aca ggc ccg aag gaa cag aag aag aag gtg gag aga gag aca gag 288
 56 Pro Thr Gly Pro Lys Glu Gln Lys Lys Val Glu Arg Glu Thr Glu
 57 85 90 95
 59 aca gat ccg gtc cat cag tga 309

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/577,974

DATE: 05/15/2006
TIME: 10:03:36

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Output Set: N:\CRF4\05152006\J577974.raw

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 67 <213> ORGANISM: Human immunodeficiency virus
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 76 20 25 30
 79 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
 80 35 40 45
 83 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
 84 50 55 60
 87 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
 88 65 70 75 80
 91 Pro Thr Gly Pro Lys Glu Gln Lys Lys Lys Val Glu Arg Glu Thr Glu
 92 85 90 95
 95 Thr Asp Pro Val His Gln
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 102 <213> ORGANISM: Human immunodeficiency virus
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 106 <221> NAME/KEY: CDS
 107 <222> LOCATION: (1)..(261)
 109 <400> SEQUENCE: 3
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 111 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
 112 1 5 10 15
 114 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt 96
 115 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 116 20 25 30
 118 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tac ggc 144
 119 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
 120 35 40 45
 122 agg aag aag cgg aga cag cgt cga aga cct cct caa ggc agt cag act 192
 123 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
 124 50 55 60
 126 cat caa gtt tct cta tca aag caa ccc acc tcc caa tcc cga ggg gac 240
 127 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
 128 65 70 75 80
 130 ccg aca ggc ccg aag gaa tag 261
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 132 85
 135 <210> SEQ ID NO: 4
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 PATENT APPLICATION: US/10/577,974
 DATE: 05/15/2006
 TIME: 10:03:36

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137 <212> TYPE: PRT
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 146 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 147 20 25 30
 150 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
 151 35 40 45
 154 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
 155 50 55 60
 158 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
 159 65 70 75 80
 162 Pro Thr Gly Pro Lys Glu
 163 85
 166 <210> SEQ ID NO: 5
 167 <211> LENGTH: 261
 168 <212> TYPE: DNA
 169 <213> ORGANISM: Human immunodeficiency virus
 172 <220> FEATURE:
 173 <221> NAME/KEY: CDS
 174 <222> LOCATION: (1)..(261)
 176 <400> SEQUENCE: 5
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 178 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
 179 1 5 10 15
 181 cag cct aaa act gct ggt acc aat tgc tat tgt aaa aag tgt tgc ttt 96
 182 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 183 20 25 30
 185 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc 144
 186 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
 187 35 40 45
 189 agg aag aag cg^g aga cag cga aga cct cct caa ggc agt cag act 192
 190 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
 191 50 55 60
 193 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac 240
 194 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
 195 65 70 75 80
 197 ccg aca ggc ccg aag gaa tag 261
 198 Pro Thr Gly Pro Lys Glu
 199 85
 202 <210> SEQ ID NO: 6
 203 <211> LENGTH: 86
 204 <212> TYPE: PRT
 205 <213> ORGANISM: Human immunodeficiency virus
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 210 1 5 10 15
 213 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe

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PATENT APPLICATION: US/10/577,974

DATE: 05/15/2006
TIME: 10:03:36

Input Set : A:\50318.012001.txt
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214          20          25          30
217 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
218          35          40          45
221 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
222          50          55          60
225 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
226 65          70          75          80
229 Pro Thr Gly Pro Lys Glu
230          85
233 <210> SEQ ID NO: 7
234 <211> LENGTH: 261
235 <212> TYPE: DNA
236 <213> ORGANISM: Human immunodeficiency virus
239 <220> FEATURE:
240 <221> NAME/KEY: CDS
241 <222> LOCATION: (1)..(261)
243 <400> SEQUENCE: 7
244 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt      48
245 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
246 1          5          10          15
248 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt      96
249 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Cys Cys Phe
250          20          25          30
252 cat tgc caa gtt tgt ttc ata aca gct gcc tta ggc atc tcc tat ggc      144
253 His Cys Gln Val Cys Phe Ile Thr Ala Ala Leu Gly Ile Ser Tyr Gly
254          35          40          45
256 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act      192
257 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
258          50          55          60
260 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac      240
261 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
262 65          70          75          80
264 ccg aca ggc ccg aag gaa tag
265 Pro Thr Gly Pro Lys Glu
266          85
269 <210> SEQ ID NO: 8
270 <211> LENGTH: 86
271 <212> TYPE: PRT
272 <213> ORGANISM: Human immunodeficiency virus
274 <400> SEQUENCE: 8
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280 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Cys Cys Phe
281          20          25          30
284 His Cys Gln Val Cys Phe Ile Thr Ala Ala Leu Gly Ile Ser Tyr Gly
285          35          40          45
288 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
289          50          55          60
292 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp

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PATENT APPLICATION: US/10/577,974

DATE: 05/15/2006
TIME: 10:03:36

Input Set : A:\50318.012001.txt
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311	atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt			48
312	Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser			
313	1 5 10 15			
315	cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt			96
316	Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe			
317	20 25 30			
319	cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc			144
320	His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly			
321	35 40 45			
323	agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act			192
324	Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr			
325	50 55 60			
327	cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc ccg aca ggc			240
328	His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly			
329	65 70 75 80			
331	ccg aag gaa tag			252
332	Pro Lys Glu			
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344	1 5 10 15			
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348	20 25 30			
351	His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly			
352	35 40 45			
355	Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr			
356	50 55 60			
359	His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly			
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367	<210> SEQ ID NO: 11			
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370	<213> ORGANISM: Human immunodeficiency virus			
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VERIFICATION SUMMARY
PATENT APPLICATION: US/10/577,974

DATE: 05/15/2006
TIME: 10:03:37

Input Set : A:\50318.012001.txt
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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date